



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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**Sie erreichen uns unter**

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| <b>CODE:</b> | <b>LÄNGE:</b>     | <b>PREIS:</b> |
|--------------|-------------------|---------------|
| VMW_VSFT8    | 40 Hours (5 Tage) | €4,250.00     |

## Description

This five-day, extended hour course takes you from introductory to advanced VMware vSphere® 8 management skills. Building on the installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will install, configure, and manage vSphere 7. You will explore the features that build a foundation for a truly scalable infrastructure and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 8, which includes VMware ESXi™ 8 and VMware vCenter Server® 8.

## Lernziel

By the end of the course, you should be able to meet the following objectives:

- • Install and configure ESXi hosts
- • Deploy and configure vCenter
- • Use the vSphere Client to create the vCenter inventory and assign roles to vCenter users
- • Configure vCenter High Availability
- • Create and configure virtual networks using vSphere standard switches and distributed switches
- • Create and configure datastores using storage technologies supported by vSphere
- • Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- • Configure and manage a VMware Tools Repository
- • Create content libraries for managing templates and deploying virtual machines
- • Manage virtual machine resource use
- • Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- • Create and configure a vSphere cluster that is enabled with vSphere High Availability and vSphere Distributed Resource Scheduler
- • Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date
- • Configure and manage vSphere networking and storage for a large and sophisticated enterprise
- • Use host profiles to manage VMware ESXi host compliance
- • Monitor the vCenter, ESXi, and VMs performance in the vSphere client

## Zielgruppe

- • System administrators
- • System engineers

## Voraussetzungen

This course has the following prerequisites:

- • System administration experience on Microsoft Windows or Linux operating systems

## Inhalt

## Course Modules 1 Course Introduction

- • Introductions and course logistics
- • Course objectives

## 2 vSphere and Virtualization Overview

- • Explain basic virtualization concepts
- • Describe how vSphere fits in the software-defined data center and the cloud infrastructure
- • Recognize the user interfaces for accessing vSphere
- • Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs
- • Install an ESXi host

## 3 vCenter Management

- • Recognize ESXi hosts communication with vCenter
- • Deploy vCenter Server Appliance
- • Configure vCenter settings
- • Use the vSphere Client to add and manage license keys
- • Create and organize vCenter inventory objects
- • Recognize the rules for applying vCenter permissions
- • View vSphere tasks and events
- • Create a vCenter backup schedule
- • Recognize the importance of vCenter High Availability
- • Explain how vCenter High Availability works

## 4 Configure and Manage vSphere Networking

- • Configure and view standard switch configurations
- • Configure and view distributed switch configurations
- • Recognize the difference between standard switches and distributed switches
- • Explain how to set networking policies on standard and distributed switches

## 5 Configure and Manage vSphere Storage

- • Recognize vSphere storage technologies
- • Identify types of vSphere datastores
- • Describe Fibre Channel components and addressing
- • Describe iSCSI components and addressing
- • Configure iSCSI storage on ESXi
- • Create and manage VMFS datastores
- • Configure and manage NFS datastores
- • Discuss vSphere support for NVMe and iSER technologies

## 6 Deploying Virtual Machines

- • Create and provision VMs
- • Explain the importance of VMware Tools
- • Identify the files that make up a VM
- • Recognize the components of a VM
- • Navigate the vSphere Client and examine VM settings and options
- • Modify VMs by dynamically increasing resources
- • Create VM templates and deploy VMs from them
- • Clone VMs
- • Create customization specifications for guest operating systems
- • Create local, published, and subscribed content libraries
- • Deploy VMs from content libraries
- • Manage multiple versions of VM templates in content libraries

## 7 Managing Virtual Machines

- • Recognize the types of VM migrations that you can perform within a vCenter instance and across vCenter instances
- • Migrate VMs using vSphere vMotion
- • Describe the role of Enhanced vMotion Compatibility in migrations
- • Migrate VMs using vSphere Storage vMotion
- • Take a snapshot of a VM
- • Manage, consolidate, and delete snapshots
- • Describe CPU and memory concepts in relation to a virtualized environment
- • Describe how VMs compete for resources
- • Define CPU and memory shares, reservations, and limits
- • Recognize the role of a VMware Tools Repository

- • Configure a VMware Tools Repository
- • Recognize the backup and restore solution for VMs

## 8 vSphere Cluster Management

- • Use Cluster Quickstart to enable vSphere cluster services and configure the cluster
- • View information about a vSphere cluster
- • Explain how vSphere DRS determines VM placement on hosts in the cluster
- • Recognize use cases for vSphere DRS settings
- • Monitor a vSphere DRS cluster
- • Describe how vSphere HA responds to different types of failures
- • Identify options for configuring network redundancy in a vSphere HA cluster
- • Recognize the use cases for various vSphere HA settings
- • Configure a cluster enabled for vSphere DRS and vSphere HA
- • Recognize when to use vSphere Fault Tolerance
- • Describe the function of the vCLS
- • Recognize operations that might disrupt the healthy functioning of vCLS VMs

## 9 Managing the vSphere Lifecycle

- • Generate vCenter interoperability reports
- • Recognize features of vSphere Lifecycle Manager
- • Describe ESXi images and image depots
- • Enable vSphere Lifecycle Manager in a vSphere cluster
- • Validate ESXi host compliance against a cluster image and remediate ESXi hosts using vSphere Lifecycle Manager
- • Describe vSphere Lifecycle Manager automatic recommendations
- • Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

## 10 Network Operations

- • Configure and manage vSphere distributed switches
- • Describe how VMware vSphere Network I/O Control enhances performance
- • Define vSphere Distributed Services Engine
- • Describe the use cases and benefits of vSphere Distributed Services Engine

## 11 Storage Operations

- • Describe the architecture and requirements of vSAN configuration
- • Describe storage policy-based management
- • Recognize components in the vSphere Virtual Volumes architecture
- • Configure Storage I/O Control

## 12 ESXi Operations

- • Use host profiles to manage ESXi configuration compliance
- • Recognize the benefits of using configuration profiles

## 13 vSphere Monitoring

- • Monitor the key factors that can affect a virtual machine's performance
- • Describe the factors that influence vCenter performance
- • Use vCenter tools to monitor resource use
- • Create custom alarms in vCenter
- • Describe the benefits and capabilities of VMware Skyline
- • Recognize uses for Skyline Advisor Pro

## Test und Zertifizierung

Attending this course meets the training requirement to achieve the following certification:

- • VMware Certified Professional

– Data Center Virtualization (VCP-DCV)

## Kurstermine

| Datum       | Lokation          | Time Zone | Sprache | Type                  | Durchführungsgarantie | PREIS     |
|-------------|-------------------|-----------|---------|-----------------------|-----------------------|-----------|
| 19 Aug 2024 | Virtual Classroom |           | German  | Instructor Led Online |                       | €4,250.00 |
| 26 Aug 2024 | Virtual Classroom |           | German  | Instructor Led Online |                       | €4,250.00 |
| 07 Oct 2024 | Virtual Classroom |           | German  | Instructor Led Online |                       | €4,250.00 |
| 25 Nov 2024 | Virtual Classroom | GMT       | German  | Instructor Led Online |                       | €4,250.00 |
| 09 Dec 2024 | Virtual Classroom | GMT       | German  | Instructor Led Online |                       | €4,250.00 |
| 09 Sep 2024 | Virtual Classroom |           | German  | Instructor Led Online |                       | €4,250.00 |
| 21 Oct 2024 | Virtual Classroom |           | German  | Instructor Led Online |                       | €4,250.00 |

## Zusätzliche Information

Diese Schulung ist auch als Vor-Ort-Schulung verfügbar. Bitte kontaktieren Sie uns, um mehr zu erfahren.